

separately revising the original query structure at each of the databases, to produce query structures searchable within the respective databases.

35. (new) The method as claimed in claim 34, wherein the original query structure is revised in a decentralized fashion, without middleware.

36. (new) A method of querying a plurality of databases, comprising:
submitting a query to a plurality of databases, the query containing information fields not contained in all of the databases; and
separately searching for the query at the plurality of databases, each database using a reference logic at the database to infer a relationship between fields in the database and fields in the query not contained in the database.

37. (new) The method as claimed in claim 36, wherein each database infers the relationship in a decentralized fashion, without middleware.

38. (new) A method of querying a plurality of databases, comprising:
submitting a query in an original query structure to a plurality of databases; and
separately revising the original query structure at each of the databases, independently of middleware, to produce query structures searchable within the respective databases.

REMARKS

INTRODUCTION:

Claims 1-2, 12-13 and 23-24 were rejected under 35 U.S.C. § 102 as being anticipated by Machihara et al. (USPN 6,233,578).

Claims 3-11, 14-22 and 25-33 were rejected under 35 U.S.C. § 103 as being unpatentable over Machihara et al. (USPN 6,233,578).

In accordance with the foregoing, these rejections are respectfully traversed. Claims 1, 10, 12, and 21 have been amended. New claims 34-38 have been added. Claims 23-33 have been cancelled without prejudice or disclaimer. No new matter has been added.

Claims 1-33 are pending and under consideration. Reconsideration is requested.

REJECTION UNDER 35 U.S.C. § 102:

At page 2 of the Office Action, claims 1-2, 12-13 and 23-24 were rejected under 35 U.S.C. § 102 as being anticipated by Machihara et al. (USPN 6,233,578).

Machihara et al. discloses a method for querying a database with database contents with a database structure wherein the query structure is different from the database structure. In particular, Machihara et al. shows an information retrieval system allowing the user to retrieve desired information from a plurality of databases without having to know the names for the relevant databases or the system structures. To do so, an information retrieval request is analyzed and relevant database systems which would contain the requested data in consultation with reference information are determined (see col. 5, line 30-36). Said reference information may be interpreted as the reference logic defined in independent claims 1 and 12 of the present invention.

However, the reference information disclosed in Machihara et al. does not enable the query structure and the database structure to reference a standard structure since the reference information is information concerning location information for data stored in a plurality of different database systems (see col. 5, lines 62 to 64). Hence, the reference information of Machihara et al. refers directly to the database structure without using a standard structure.

In contrast, in the present invention the reference logic provides a link between the query structure and the database structure via a standard structure. Consequently, new databases may be searched by the method according to the present invention without analyzing the exact content of the databases. In the present invention, it is sufficient that the new databases reference the standard structure. Hence, in the present invention, information may be retrieved from the database, without previously analyzing the database, via the reference logic with which the query structure and the database structure reference the standard structure.

As set forth in the description of the application, on page 1, last paragraph, in order to address several databases simultaneously, a corresponding interface named "middleware" is used in the prior art. Said middleware has the disadvantage that the databases have to be analyzed previously. As may be seen from FIG. 3, of the Machihara et al. reference, the system still includes a middleware section (reference no. 150). Thus, Machihara et al. teaches that the databases have to be analyzed previously, which is in contrast to the present invention.

Since the Machihara et al. reference does not teach or suggest a reference logic that refers to a standard structure, to which the present invention is directed, it is respectfully submitted that the amended independent claims 1 and 12 are allowable under 35 U.S.C. § 102 and are not anticipated by Machihara et al. (USPN 6,233,578). Thus, since the remaining claims depend from the amended independent claims 1 and 12, all of claims 1-22 and new claims 34-37 are deemed to

be allowable under 35 U.S.C. § 102 and are not anticipated by Machihara et al. (USPN 6,233,578).

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at pages 3-5, claims 3-11, 14-22 and 25-33 were rejected under 35 U.S.C. § 103 as being unpatentable over Machihara et al. (USPN 6,233,578).

These rejections are traversed and reconsideration is requested.

Claims 23-33 have been cancelled without prejudice or disclaimer.

As described above, since the Machihara et al. reference does not teach or suggest a reference logic that refers to a standard structure, to which the present invention is directed, it is respectfully submitted that the amended independent claims 1 and 12 are allowable under 35 U.S.C. § 103 and are patentable over Machihara et al. (USPN 6,233,578). Claims 3-11 and 14-22 are dependent claims, depending from amended independent claims 1 and 12, respectively. Dependent claims depend from the above-discussed amended independent claims and are not required to be non-obvious in and of themselves. Since claims 1-2 and 12-13 are non-obvious, claims 3-11 and 14-22 are deemed to be non-obvious for at least the reasons that claims 1-2 and 12-13 are non-obvious.

Hence, it is respectfully submitted that claims 3-11 and 14-22 are not obvious and are allowable under 35 U.S.C. § 103 over Machihara et al. (USPN 6,233,578).

NEW CLAIMS:

New claims 34-38 recite that the features of the present invention include:

(34) A method of querying a plurality of databases, comprising: submitting a query in an original query structure to a plurality of databases; and separately revising the original query structure at each of the databases, to produce query structures searchable within the respective databases;

(35) The method as claimed in claim 34, wherein the original query structure is revised in a decentralized fashion, without middleware;

(36) A method of querying a plurality of databases, comprising: submitting a query to a plurality of databases, the query containing information fields not contained in all of the databases; and separately searching for the query at the plurality of databases, each database using a reference logic at the database to infer a relationship between fields in the database and fields in

the query not contained in the database;

(37) The method as claimed in claim 36, wherein each database infers the relationship in a decentralized fashion, without middleware; and

(38) A method of querying a plurality of databases, comprising: submitting a query in an original query structure to a plurality of databases; and separately revising the original query structure at each of the databases, independently of middleware, to produce query structures searchable within the respective databases.

It is respectively submitted that the prior art fails to teach or suggest the above. It is submitted that these new claims distinguish over the prior art.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: June 26, 2023

700 Eleventh Street, NW, Suite 500
Washington, D.C. 20001
(202) 434-1500

By: Darleen J. Stockley
Darleen J. Stockley
Registration No. 34,257